

A new species of *Polyalthia* Bl. (Annonaceae) from Peninsular India

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Abstract

Polyalthia shendurunii, a new species of *Polyalthia* from Peninsular India, is described and illustrated.

The Old World genus *Polyalthia* B.L., comprising of about a hundred species, is distributed from Africa to the West Pacific with the centre of distribution in South-East Asia (Huber, 1985). Of them, 12 species have been reported from India, so far (Santapau & Henry, 1973).

During recent explorations in Shenduruny Wildlife Sanctuary on the Western Ghats of Kollam District in Kerala, we collected an interesting specimen, which did not match with any of the known species. Like *P. coffeoides*, it was cauliflorous, but the two differed in several other characters. After a careful study of published literature, we concluded that it is a new species and this was endorsed also by Paul Kessler, Rijksherbarium, Leiden. The new taxon is described here under the name *P. shendurunii*, after the type locality.

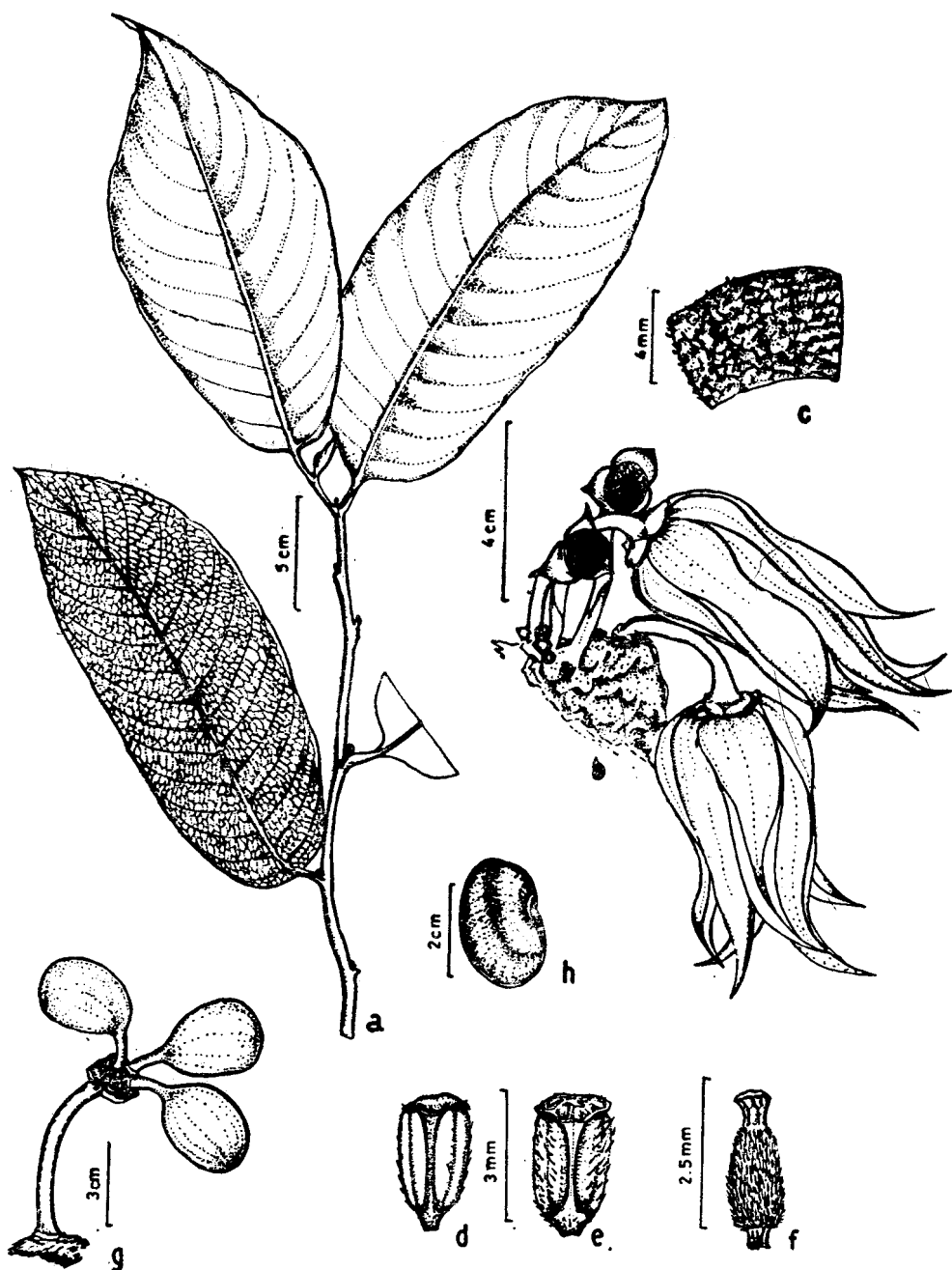
Polyalthia shendurunii Basha & Sasi., *sp. nov.*

(Fig. 1)

Arbor usque ad 15 m alta; ramuli juniores puberuli. Petioli ca. 0.5 cm longi. Folia membranacea, glabra, oblonga usque elliptico-lanceolata, 15–26 cm longa, 6–8.5 cm lata, basi rotundata vel truncata, apice usque ad 3 cm acuminata, nervis lateralibus 10–14 paribus. Flores solitariae, ramuliflorae vel usque ad 10, fasciculatae in tuberculis trunci. Sepala basi connata, persistentia. Petala valvata, subaequalia, 8–9 cm longa, 1.5–2 cm lata. Stamina numerosa, hirsuta. Carpella ca. 50, ovulis solitariis, basalis. Carpodia usque ad 7, ca. 1.8 cm stipitata, oblonga usque ovoidea, glabra, ca. 3 cm longa, ca. 2.5 cm diametro, semen 1, oblongus, ca. 2.8 cm longus, ca. 1.8 cm diametro.

Typus: India, Kerala State, Kollam district, Shenduruny, 25 May 1992. *Sasidharan* 5842 (holo. MH; iso. KFRI)

S. Chand Basha and N. Sasidharan



Figs. a-h. *Polyalthia shendurunii* Basha & Sasi. a. twig, b. flowers on tubercle from trunk, c. portion of petal showing rugation and indumentum, d. & e. dorsal and ventral views of stamen, f. carpel, g. fruit, h. seed.

A new species of *Polyalthia* Bl.

Trees to 15 m tall; bark smooth, brownish-black; branchlets puberulous, later glabrous. Leaves $15 - 26 \times 6 - 8.5$ cm, oblong or elliptic-lanceolate, acuminate, acumen to 3 cm long, base rounded or truncate, glabrous, midrib impressed and channelled above, lateral veins 10—14 pairs, intercostae scalariform-reticulate, thin; petioles ca. 0.5 cm long. Flowers on twigs solitary and/or upto 10 in fascicles on tubercles on the trunk. Pedicels 4—5.5 cm long and 2—3 mm across; indumentum dense, hairs simple; bract $3-4 \times 2.5-3$ mm, towards the lower half of the pedicel, ovate-acute, tomentose. Sepals $1.5-2 \times 1-1.3$ cm., deltoid-ovate, acuminate, reflexed, connate at base, persistent. Petals valvate, subequal; inner $8-9 \times 1.5-2$ cm, outer slightly smaller, oblong, acute to acuminate, coriaceous, minutely rugose and adpressed-tomentose on both sides greenish-yellow to yellow. Stamens numerous, closely arranged, 3 mm long; anthers and connective hirsute, more on the ventral surface, appendage glabrous. Carpels ca. 50, each 2.5 mm long; ovule solitary, basal; style indistinct; stigma orbicular, depressed at middle, margins shortly lobed, glabrous. Fruit pedicel 4—5 mm across; fruitlets to 7, oblong-ovoid, glabrous, 3×2.5 cm, stalked; stalk ca. 1.8 cm long. Seed oblong, 2.8×1.8 cm.

Occasional in evergreen forests above 500 m elevation.

Polyalthia shendurunii is allied to *P. coffeoides* (Thw. ex Hook. f. & Thoms.) Hook. f. & Thoms. in having cauliflorous flowers with lanceolate - acuminate flat petals, 1-ovuled carpels and symmetric leaf base, but differs in the thick pedicels, larger petals, hirsute anthers and connective, glabrous appendage; densely velutinous ovary and depressed, glabrous stigma.

Note: J. D. Hooker and Thomson (1872) classified this genus into two sections based solely on the number of ovules in carpels, viz. Sect. *Polyalthia* (ovules 2, rarely more) and Sect. *Monoon* (Miq.) Hook. f. & Thoms. (ovule solitary) But, Huber (1985) has rejected this classification as unnatural, because "the affinities are rather obscured than illustrated" by it. Instead, he has recognised three informal groups: viz. *Longifolia* group, *Korinti* group and *Suberosa* group. This species, *P. shendurunii*, belongs to the *Longifolia* group.

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